
Applied Physics B Lasers and Optics

**Volume B 58
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PHYSICS AND ASTRONOMY CLASSIFICATION SCHEME (PACS)

Shortened version for use in classifying papers for Applied Physics

General

- 02 Mathematical methods in physics
- 06 Measurement science and metrology
- 07 Specific instrumentation
 - 07.60 Optical instruments and techniques, detection of radiation
 - 07.65 Optical spectroscopy and spectrometers
 - 07.75 Mass spectrometers and mass-spectroscopy techniques
 - 07.80 Electron and ion microscopes and spectrometers; techniques
 - 07.85 X-ray and gamma-ray instruments and techniques

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- 33 Molecular spectra and interactions of molecules with photons
- 34 Atomic and molecular collision processes and interactions
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- 36 Studies of special atoms and molecules (macro- and polymer molecules, clusters)

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 - 42.50 Quantum optics
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 - E Molecular gas lasers (CO_2 , CO, N_2O , formaldehyde)
 - G Excimer lasers
 - H Atomic, ionic, and other gas lasers
 - M Laser action in liquids and organic dyes
 - P Laser action in semiconductors
 - R Laser action in solid-state lasers
 - T Free-electron lasers
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 - D Laser resonators, cavities, and amplifiers
 - E Laser beam deflection and focusing
 - F Laser beam modulation, mode locking, and tuning
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 - 42.80 Optical devices, techniques, and applications (including fiber and integrated optics)
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Photophysics and Laser Chemistry

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Frequency chain towards the Ca intercombination line based on laser diodes: First step.
Appl. Phys. B 58/6, 529-532 (1994) PACS: 42.60 32.30 43.65
- Bangar Raju B., Varadarajan T.S.:
Laser characteristics of a new laser dye: 7-diethylamino 3-styryl benzimidazo (1,2-a) quinoline.
Appl. Phys. B 58/1, 79-81 (1994) PACS: 42.55M 82.50
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A 180 mW Nd:LaSc₃(BO₃)₄ single-frequency TEM₀₀ microchip laser pumped by an injection-locked diode-laser array.
Appl. Phys. B 58/5, 381-388 (1994) PACS: 42.60B
- Brauch U.:
Temperature dependence of efficiency and thermal lensing of diode-laser-pumped Nd:YAG lasers.
Appl. Phys. B 58/5, 397-402 (1994) PACS: 42.55R
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Reverse-saturable absorption in aluminophthalocyanine-doped xerogels.
Appl. Phys. B 58/6, 443-445 (1994) PACS: 42.10 42.65 42.70
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Preliminary studies of radiation coupling between remote soft X-ray laser amplifiers.
Appl. Phys. B 58/1, 51-56 (1994) PACS: 42.60B 42.60 42.10
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Wide- and narrow-band saturated fluorescence measurements of hydroxyl concentration in premixed flames from 1 bar to 10 bar.
Appl. Phys. B 58/6, 519-528 (1994) PACS: 34.50E 42.65 82.40
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A new method to measure the wavelength of single-mode pulsed lasers with a scanning Michelson interferometer.
Appl. Phys. B 58/1, 63-67 (1994) PACS: 07.65 07.60 06.30
- Danger T., Bleckmann A., Huber G.:
Stimulated emission and laser action of Pr³⁺-doped YAlO₃.
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Utilization of photoreversible optical nonlinearities in *trans-cis* photochromic molecules for spatial light modulation.
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- Delfyett P.J., Dienes A., Heritage J.P., Hong M.Y., Chang Y.H.:
Femtosecond hybrid mode-locked semiconductor laser and amplifier dynamics.
Appl. Phys. B 58/3, 183-195 (1994) PACS: 42.55P 42.65
- Eichler H.J., Haase A., Kokta M.R., Menzel R.:
Cr⁴⁺:YAG as passive Q-switch for a Nd:YALO-oscillator with an average repetition rate of 2.7 kHz, TEM₀₀ mode and 13 W output.
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Orange, red and deep-red flashlamp-pumped Pr³⁺:LiYF₄ laser with improved output energy and efficiency.
Appl. Phys. B 58/5, 421-424 (1994) PACS: 42.60L 42.55 42.70
- Fermann M.E.:
Ultrashort-pulse sources based on single-mode rare-earth-doped fibers.
Appl. Phys. B 58/3, 197-209 (1994) PACS: 42.60D 42.60 42.80
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Plasma-mediated ablation of brain tissue with picosecond laser pulses.
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Investigation on amplitude and frequency noise of injection-locked diode-pumped Nd:YAG lasers.
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Investigation of XeCl vibrational and quenching kinetics: Numerical simulation of gain and laser spectra in discharge-pumped oscillators.
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Principles of passive mode locking.
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High-average-power flashlamp-pumped Nd:glass fiber-bundle laser.
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Optical parametric processes and broadly tunable femtosecond sources.
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Nonlinear resonances and phase transitions of two-ion Coulomb clusters in a Paul trap: Calculations without laser cooling.
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Integrated nanostrip dipole antennas for coherent 30 THz infrared radiation.
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Hydrogen-like recombination X-ray lasers using ps pulse drivers.
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* In the March issue of Volume A 58 [Appl. Phys. A 58/3 (1994)], there was unfortunately an error in pagination; all page numbers should have been 100 higher. In the present index the correct page numbers are given.

